

# SEQUENCE LISTING

<110> Bristol-Myers Squibb Company

<120> POLYNUCLEOTIDE ENCODING A NOVEL HUMAN G-PROTEIN COUPLED RECEPTOR  
VARIANT OF HM74, HGPRBMY74

<130> D0323 NP

<150> U.S. 60/454,942

<151> 2003-03-14

<160> 58

<170> PatentIn version 3.2

<210> 1

<211> 2067

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

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Met Asn Arg His His Leu Gln Asp His Phe Leu Glu Ile Asp Lys Lys
1          5          10          15

aac tgc tgt gtg ttc cga gat gac ttc att gtc aag gtg ttg ccg ccg      153
Asn Cys Cys Val Phe Arg Asp Asp Phe Ile Val Lys Val Leu Pro Pro
          20          25          30

gtg ttg ggg ctg gag ttt atc ttc ggg ctt ctg ggc aat ggc ctt gcc      201
Val Leu Gly Leu Glu Phe Ile Phe Gly Leu Leu Gly Asn Gly Leu Ala
          35          40          45

ctg tgg att ttc tgt ttc cac ctc aag tcc tgg aaa tcc agc cgg att      249
Leu Trp Ile Phe Cys Phe His Leu Lys Ser Trp Lys Ser Ser Arg Ile
          50          55          60

ttc ctg ttc aac ctg gca gtg gct gac ttt cta ctg atc atc tgc ctg      297
Phe Leu Phe Asn Leu Ala Val Ala Asp Phe Leu Leu Ile Ile Cys Leu
65          70          75          80

ccc ttc ctg atg gac aac tat gtg agg cgt tgg gac tgg aag ttt ggg      345
Pro Phe Leu Met Asp Asn Tyr Val Arg Arg Trp Asp Trp Lys Phe Gly
          85          90          95

gac atc cct tgc cgg ctg atg ctc ttc atg ttg gct atg aac cgc cag      393
Asp Ile Pro Cys Arg Leu Met Leu Phe Met Leu Ala Met Asn Arg Gln
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gcc atc atc tct tgc ctt ctg tgg gcc atc act att gcc ctg aca gtc Ala Ile Ile Ser Cys Leu Leu Trp Gly Ile Thr Ile Gly Leu Thr Val 145 150 155 160	537
cac ctc ctg aag aag aag atg ccg atc cag aat gcc ggt gca aat ttg His Leu Leu Lys Lys Lys Met Pro Ile Gln Asn Gly Gly Ala Asn Leu 165 170 175	585
tgc agc agc ttc agc atc tgc cat acc ttc cag tgg cac gaa gcc atg Cys Ser Ser Phe Ser Ile Cys His Thr Phe Gln Trp His Glu Ala Met 180 185 190	633
ttc ctc ctg gag ttc ttc ctg ccc ctg gcc atc atc ctg ttc tgc tca Phe Leu Leu Glu Phe Phe Leu Pro Leu Gly Ile Ile Leu Phe Cys Ser 195 200 205	681
gcc aga att atc tgg agc ctg cgg cag aga caa atg gac cgg cat gcc Ala Arg Ile Ile Trp Ser Leu Arg Gln Arg Gln Met Asp Arg His Ala 210 215 220	729
aag atc aag aga gcc atc acc ttc atc atg gtg gtg gcc atc gtc ttt Lys Ile Lys Arg Ala Ile Thr Phe Ile Met Val Val Ala Ile Val Phe 225 230 235 240	777
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ctc ctg cac act tcg gcc acg cag aat tgt gaa gtg tac cgc tcg gtg Leu Leu His Thr Ser Gly Thr Gln Asn Cys Glu Val Tyr Arg Ser Val 260 265 270	873
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aaa acc aga ggc gct cca gag gcg tta atg gcc aac tcc ggt gag cca	1113

Lys Thr Arg Gly Ala Pro Glu Ala Leu Met Ala Asn Ser Gly Glu Pro	
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tgg agc ccc tct tat ctg ggc cca acc tca aat aac cat tcc aag aag	1161
Trp Ser Pro Ser Tyr Leu Gly Pro Thr Ser Asn Asn His Ser Lys Lys	
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gga cat tgt cac caa gaa cca gca tct ctg gag aaa cag ttg ggc tgt	1209
Gly His Cys His Gln Glu Pro Ala Ser Leu Glu Lys Gln Leu Gly Cys	
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tgc atc gag taatgtcact ggactcggcc taagggtttcc tggaacttcc	1258
Cys Ile Glu	
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agattcagag aatctgattt agggaaactg tggcagatga gtgggagact ggttgcaagg	1318
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Val Leu Gly Leu Glu Phe Ile Phe Gly Leu Leu Gly Asn Gly Leu Ala  
 35 40 45

Leu Trp Ile Phe Cys Phe His Leu Lys Ser Trp Lys Ser Ser Arg Ile  
 50 55 60

Phe Leu Phe Asn Leu Ala Val Ala Asp Phe Leu Leu Ile Ile Cys Leu  
 65 70 75 80

Pro Phe Leu Met Asp Asn Tyr Val Arg Arg Trp Asp Trp Lys Phe Gly  
 85 90 95

Asp Ile Pro Cys Arg Leu Met Leu Phe Met Leu Ala Met Asn Arg Gln  
 100 105 110

Gly Ser Ile Ile Phe Leu Thr Val Val Ala Val Asp Arg Tyr Phe Arg  
 115 120 125

Val Val His Pro His His Ala Leu Asn Lys Ile Ser Asn Arg Thr Ala  
 130 135 140

Ala Ile Ile Ser Cys Leu Leu Trp Gly Ile Thr Ile Gly Leu Thr Val  
 145 150 155 160

His Leu Leu Lys Lys Lys Met Pro Ile Gln Asn Gly Gly Ala Asn Leu  
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Cys Ser Ser Phe Ser Ile Cys His Thr Phe Gln Trp His Glu Ala Met  
 180 185 190

Phe Leu Leu Glu Phe Phe Leu Pro Leu Gly Ile Ile Leu Phe Cys Ser  
 195 200 205

Ala Arg Ile Ile Trp Ser Leu Arg Gln Arg Gln Met Asp Arg His Ala  
 210 215 220

Lys Ile Lys Arg Ala Ile Thr Phe Ile Met Val Val Ala Ile Val Phe  
 225 230 235 240

Val Ile Cys Phe Leu Pro Ser Val Val Val Arg Ile Arg Ile Phe Trp  
 245 250 255

Leu Leu His Thr Ser Gly Thr Gln Asn Cys Glu Val Tyr Arg Ser Val  
 260 265 270

Asp Leu Ala Phe Phe Ile Thr Leu Ser Phe Thr Tyr Met Asn Ser Met  
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Leu Asp Pro Val Val Tyr Tyr Phe Ser Ser Pro Ser Phe Pro Asn Phe  
 290 295 300

Phe Ser Thr Leu Ile Asn Arg Cys Leu Gln Arg Lys Met Thr Gly Glu  
 305 310 315 320

Pro Asp Asn Asn Arg Ser Thr Ser Val Glu Leu Thr Gly Asp Pro Asn  
 325 330 335

Lys Thr Arg Gly Ala Pro Glu Ala Leu Met Ala Asn Ser Gly Glu Pro  
 340 345 350

Trp Ser Pro Ser Tyr Leu Gly Pro Thr Ser Asn Asn His Ser Lys Lys  
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Gly His Cys His Gln Glu Pro Ala Ser Leu Glu Lys Gln Leu Gly Cys  
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Cys Ile Glu  
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Val Leu Gly Leu Glu Phe Ile Phe Gly Leu Leu Gly Asn Gly Leu Ala  
 35 40 45

Leu Trp Ile Phe Cys Phe His Leu Lys Ser Trp Lys Ser Ser Arg Ile

50		55		60											
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Pro 85	Phe 86	Val 87	Met 88	Asp 89	Tyr 90	Tyr 91	Val 92	Arg 93	Arg 94	Ser 95	Asp 96	Trp 97	Asn 98	Phe 99	Gly 100
Asp 105	Ile 106	Pro 107	Cys 108	Arg 109	Leu 110	Val 111	Leu 112	Phe 113	Met 114	Phe 115	Ala 116	Met 117	Asn 118	Arg 119	Gln 120
Gly 125	Ser 126	Ile 127	Ile 128	Phe 129	Leu 130	Thr 131	Val 132	Val 133	Ala 134	Val 135	Asp 136	Arg 137	Tyr 138	Phe 139	Arg 140
Val 145	Val 146	His 147	Pro 148	His 149	His 150	Ala 151	Leu 152	Asn 153	Lys 154	Ile 155	Ser 156	Asn 157	Trp 158	Thr 159	Ala 160
Ala 165	Ile 166	Ile 167	Ser 168	Cys 169	Leu 170	Leu 171	Trp 172	Gly 173	Ile 174	Thr 175	Val 176	Gly 177	Leu 178	Thr 179	Val 180
His 185	Leu 186	Leu 187	Lys 188	Lys 189	Lys 190	Leu 191	Leu 192	Ile 193	Gln 194	Asn 195	Gly 196	Pro 197	Ala 198	Asn 199	Val 200
Cys 205	Ile 206	Ser 207	Phe 208	Ser 209	Ile 210	Cys 211	His 212	Thr 213	Phe 214	Arg 215	Trp 216	His 217	Glu 218	Ala 219	Met 220
Phe 225	Leu 226	Leu 227	Glu 228	Phe 229	Leu 230	Leu 231	Pro 232	Leu 233	Gly 234	Ile 235	Ile 236	Leu 237	Phe 238	Cys 239	Ser 240
Ala 245	Arg 246	Ile 247	Ile 248	Trp 249	Ser 250	Leu 251	Arg 252	Gln 253	Arg 254	Gln 255	Met 256	Asp 257	Arg 258	His 259	Ala 260
Lys 265	Ile 266	Lys 267	Arg 268	Ala 269	Ile 270	Thr 271	Phe 272	Ile 273	Met 274	Val 275	Val 276	Ala 277	Ile 278	Val 279	Phe 280
Val 285	Ile 286	Cys 287	Phe 288	Leu 289	Pro 290	Ser 291	Val 292	Val 293	Val 294	Arg 295	Ile 296	Arg 297	Ile 298	Phe 299	Trp 300
Leu 305	Leu 306	His 307	Thr 308	Ser 309	Gly 310	Thr 311	Gln 312	Asn 313	Cys 314	Glu 315	Val 316	Tyr 317	Arg 318	Ser 319	Val 320
Asp 325	Leu 326	Ala 327	Phe 328	Phe 329	Ile 330	Thr 331	Leu 332	Ser 333	Phe 334	Thr 335	Tyr 336	Met 337	Asn 338	Ser 339	Met 340

Leu Asp Pro Val Val Tyr Tyr Phe Ser Ser Pro Ser Phe Pro Asn Phe  
 290 295 300

Phe Ser Thr Leu Ile Asn Arg Cys Leu Gln Arg Lys Met Thr Gly Glu  
 305 310 315 320

Pro Asp Asn Asn Arg Ser Thr Ser Val Glu Leu Thr Gly Asp Pro Asn  
 325 330 335

Lys Thr Arg Gly Ala Pro Glu Ala Leu Met Ala Asn Ser Gly Glu Pro  
 340 345 350

Trp Ser Pro Ser Tyr Leu Gly Pro Thr Ser Asn Asn His Ser Lys Lys  
 355 360 365

Gly His Cys His Gln Glu Pro Ala Ser Leu Glu Lys Gln Leu Gly Cys  
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Cys Ile Glu  
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Val Leu Gly Leu Glu Phe Ile Phe Gly Leu Leu Gly Asn Gly Leu Ala  
 35 40 45

Leu Trp Ile Phe Cys Phe His Leu Lys Ser Trp Lys Ser Ser Arg Ile  
 50 55 60

Phe Leu Phe Asn Leu Ala Val Ala Asp Phe Leu Leu Ile Ile Cys Leu  
 65 70 75 80

Pro Phe Leu Met Asp Asn Tyr Val Arg Arg Trp Asp Trp Lys Phe Gly  
                     85                    90                    95

Asp Ile Pro Cys Arg Leu Met Leu Phe Met Leu Ala Met Asn Arg Gln  
                     100                    105                    110

Gly Ser Ile Ile Phe Leu Thr Val Val Ala Val Asp Arg Tyr Phe Arg  
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Val Val His Pro His His Ala Leu Asn Lys Ile Ser Asn Arg Thr Ala  
                     130                    135                    140

Ala Ile Ile Ser Cys Leu Leu Trp Gly Ile Thr Ile Gly Leu Thr Val  
                     145                    150                    155                    160

His Leu Leu Lys Lys Lys Met Pro Ile Gln Asn Gly Gly Ala Asn Leu  
                     165                    170                    175

Cys Ser Ser Phe Ser Ile Cys His Thr Phe Gln Trp His Glu Ala Met  
                     180                    185                    190

Phe Leu Leu Glu Phe Phe Leu Pro Leu Gly Ile Ile Leu Phe Cys Ser  
                     195                    200                    205

Ala Arg Ile Ile Trp Ser Leu Arg Gln Arg Gln Met Asp Arg His Ala  
                     210                    215                    220

Lys Ile Lys Arg Ala Ile Thr Phe Ile Met Val Val Ala Ile Val Phe  
                     225                    230                    235                    240

Val Ile Cys Phe Leu Pro Ser Val Val Val Arg Ile Arg Ile Phe Trp  
                     245                    250                    255

Leu Leu His Thr Ser Gly Thr Gln Asn Cys Glu Val Tyr Arg Ser Val  
                     260                    265                    270

Asp Leu Ala Phe Phe Ile Thr Leu Ser Phe Thr Tyr Met Asn Ser Met  
                     275                    280                    285

Leu Asp Pro Val Val Tyr Tyr Phe Ser Ser Pro Ser Phe Pro Asn Phe  
                     290                    295                    300

Phe Ser Thr Leu Ile Asn Arg Cys Leu Gln Arg Lys Met Thr Gly Glu



305 310 315 320

Pro Asp Asn Asn Arg Ser Thr Ser Val Glu Leu Thr Gly Asp Pro Asn  
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Lys Thr Arg Gly Ala Pro Glu Ala Leu Met Ala Asn Ser Gly Glu Pro  
340 345 350

Trp Ser Pro Ser Tyr Leu Gly Pro Thr Ser Pro  
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Val Phe Arg Asp Glu Asn Ile Ala Lys Val Leu Pro Pro Val Leu Gly  
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Leu Glu Phe Val Phe Gly Leu Leu Gly Asn Gly Leu Ala Leu Trp Ile  
35 40 45

Phe Cys Phe His Leu Lys Ser Trp Lys Ser Ser Arg Ile Phe Leu Phe  
50 55 60

Asn Leu Ala Val Ala Asp Phe Leu Leu Ile Ile Cys Leu Pro Phe Leu  
65 70 75 80

Thr Asp Asn Tyr Val His Asn Trp Asp Trp Arg Phe Gly Gly Ile Pro  
85 90 95

Cys Arg Val Met Leu Phe Met Leu Ala Met Asn Arg Gln Gly Ser Ile  
100 105 110

Ile Phe Leu Thr Val Val Ala Val Asp Arg Tyr Phe Arg Val Val His  
115 120 125

Pro His His Phe Leu Asn Lys Ile Ser Asn Arg Thr Ala Ala Ile Ile  
130 135 140

Ser Cys Phe Leu Trp Gly Leu Thr Ile Gly Leu Thr Val His Leu Leu  
 145 150 155 160

Tyr Thr Asn Met Met Thr Lys Asn Gly Glu Ala Tyr Leu Cys Ser Ser  
 165 170 175

Phe Ser Ile Cys Tyr Asn Phe Arg Trp His Asp Ala Met Phe Leu Leu  
 180 185 190

Glu Phe Phe Leu Pro Leu Ala Ile Ile Leu Phe Cys Ser Gly Arg Ile  
 195 200 205

Ile Trp Ser Leu Arg Gln Arg Gln Met Asp Arg His Ala Lys Ile Lys  
 210 215 220

Arg Ala Ile Asn Phe Ile Met Val Val Ala Ile Val Phe Ile Ile Cys  
 225 230 235 240

Phe Leu Pro Ser Val Ala Val Arg Ile Arg Ile Phe Trp Leu Leu Tyr  
 245 250 255

Lys Tyr Asn Val Arg Asn Cys Asp Ile Tyr Ser Ser Val Asp Leu Ala  
 260 265 270

Phe Phe Thr Thr Leu Ser Phe Thr Tyr Met Asn Ser Met Leu Asp Pro  
 275 280 285

Val Val Tyr Tyr Phe Ser Ser Pro Ser Phe Pro Asn Phe Phe Ser Thr  
 290 295 300

Cys Ile Asn Arg Cys Leu Arg Lys Lys Thr Leu Gly Glu Pro Asp Asn  
 305 310 315 320

Asn Arg Ser Thr Ser Val Glu Leu Thr Gly Asp Pro Ser Thr Thr Arg  
 325 330 335

Ser Ile Pro Gly Ala Leu Met Ala Asp Pro Ser Glu Pro Gly Ser Pro  
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Pro Tyr Leu Ala Ser Thr Ser Arg  
 355 360

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 35 40 45

Tyr Ala Val Tyr Leu Leu Asn Leu Ala Leu Ala Asp Leu Leu Leu Ala  
 50 55 60

Ala Cys Leu Pro Phe Leu Ala Ala Phe Tyr Leu Ser Leu Gln Ala Trp  
 65 70 75 80

His Leu Gly Arg Val Gly Cys Trp Ala Leu Arg Phe Leu Leu Asp Leu  
 85 90 95

Ser Arg Ser Val Gly Met Ala Phe Leu Ala Ala Val Ala Leu Asp Arg  
 100 105 110

Tyr Leu Arg Val Val His Pro Arg Leu Lys Val Asn Leu Leu Ser Pro  
 115 120 125

Gln Ala Ala Leu Gly Val Ser Gly Leu Val Trp Leu Leu Met Val Ala  
 130 135 140

Leu Thr Cys Pro Gly Leu Leu Ile Ser Glu Ala Ala Gln Asn Ser Thr  
 145 150 155 160

Arg Cys His Ser Phe Tyr Ser Arg Ala Asp Gly Ser Phe Ser Ile Ile  
 165 170 175

Trp Gln Glu Ala Leu Ser Cys Leu Gln Phe Val Leu Pro Phe Gly Leu  
 180 185 190

Ile Val Phe Cys Asn Ala Gly Ile Ile Arg Ala Leu Gln Lys Arg Leu  
 195 200 205

Arg Glu Pro Glu Lys Gln Pro Lys Leu Gln Arg Ala Gln Ala Leu Val  
 210 215 220

Thr Leu Val Val Val Leu Phe Ala Leu Cys Phe Leu Pro Cys Phe Leu  
 225 230 235 240

Ala Arg Val Leu Met His Ile Phe Gln Asn Leu Gly Ser Cys Arg Ala  
 245 250 255

Leu Cys Ala Val Ala His Thr Ser Asp Val Thr Gly Ser Leu Thr Tyr  
 260 265 270

Leu His Ser Val Val Asn Pro Val Val Tyr Cys Phe Ser Ser Pro Thr  
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Gln Ala Ala Glu Pro Pro Asp Phe Asn Pro Arg Asp Ser Tyr Ser  
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 35 40 45

Tyr Ala Val Tyr Leu Leu Asn Leu Ala Leu Ala Asp Leu Leu Leu Ala  
 50 55 60

Ala Cys Leu Pro Phe Leu Ala Ala Phe Tyr Leu Ser Leu Gln Ala Trp  
 65 70 75 80

His Leu Gly Arg Val Gly Cys Trp Ala Leu His Phe Leu Leu Asp Leu  
 85 90 95

Ser Arg Ser Val Gly Met Ala Phe Leu Ala Ala Val Ala Leu Asp Arg  
 100 105 110

Tyr Leu Arg Val Val His Pro Arg Leu Lys Val Asn Leu Leu Ser Pro  
 115 120 125

Gln Ala Ala Leu Gly Val Ser Gly Leu Val Trp Leu Leu Met Val Ala  
 130 135 140

Leu Thr Cys Pro Gly Leu Leu Ile Ser Glu Ala Ala Gln Asn Ser Thr  
 145 150 155 160

Arg Cys His Ser Phe Tyr Ser Arg Ala Asp Gly Ser Phe Ser Ile Ile  
 165 170 175

Trp Gln Glu Ala Leu Ser Cys Leu Gln Phe Val Leu Pro Phe Gly Leu  
 180 185 190

Ile Val Phe Cys Asn Ala Gly Ile Ile Arg Ala Leu Gln Lys Arg Leu  
 195 200 205

Arg Glu Pro Glu Lys Gln Pro Lys Leu Gln Arg Ala Gln Ala Leu Val  
 210 215 220

Thr Leu Val Val Val Leu Phe Ala Leu Cys Phe Leu Pro Cys Phe Leu  
 225 230 235 240

Ala Arg Val Leu Met His Ile Phe Gln Asn Leu Gly Ser Cys Arg Ala  
 245 250 255

Leu Cys Ala Val Ala His Thr Ser Asp Val Thr Gly Ser Leu Thr Tyr  
 260 265 270

Leu His Ser Val Leu Asn Pro Val Val Tyr Cys Phe Ser Ser Pro Thr  
 275 280 285

Phe Arg Ser Ser Tyr Arg Arg Val Phe His Thr Leu Arg Gly Lys Gly  
 290 295 300

Gln Ala Ala Glu Pro Pro Asp Phe Asn Pro Arg Asp Ser Tyr Ser

305

310

315

&lt;210&gt; 8

&lt;211&gt; 346

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 8

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Asn Gly Val Ala Leu Cys Gly Phe Cys Phe His Met Lys Thr Trp Lys  
 35 40 45

Pro Ser Thr Val Tyr Leu Phe Asn Leu Ala Val Ala Asp Phe Leu Leu  
 50 55 60

Met Ile Cys Leu Pro Phe Arg Thr Asp Tyr Tyr Leu Arg Arg Arg His  
 65 70 75 80

Trp Ala Phe Gly Asp Ile Pro Cys Arg Val Gly Leu Phe Thr Leu Ala  
 85 90 95

Met Asn Arg Ala Gly Ser Ile Val Phe Leu Thr Val Val Ala Ala Asp  
 100 105 110

Arg Tyr Phe Lys Val Val His Pro His His Ala Val Asn Thr Ile Ser  
 115 120 125

Thr Arg Val Ala Ala Gly Ile Val Cys Thr Leu Trp Ala Leu Val Ile  
 130 135 140

Leu Gly Thr Val Tyr Leu Leu Leu Glu Asn His Leu Cys Val Gln Glu  
 145 150 155 160

Thr Ala Val Ser Cys Glu Ser Phe Ile Met Glu Ser Ala Asn Gly Trp  
 165 170 175

His Asp Ile Met Phe Gln Leu Glu Phe Phe Met Pro Leu Gly Ile Ile  
 180 185 190

Leu Phe Cys Ser Phe Lys Ile Val Trp Ser Leu Arg Arg Arg Gln Gln  
195 200 205

Leu Ala Arg Gln Ala Arg Met Lys Lys Ala Thr Arg Phe Ile Met Val  
210 215 220

Val Ala Ile Val Phe Ile Thr Cys Tyr Leu Pro Ser Val Ser Ala Arg  
225 230 235 240

Leu Tyr Phe Leu Trp Thr Val Pro Ser Ser Ala Cys Asp Pro Ser Val  
245 250 255

His Gly Ala Leu His Ile Thr Leu Ser Phe Thr Tyr Met Asn Ser Met  
260 265 270

Leu Asp Pro Leu Val Tyr Tyr Phe Ser Ser Pro Ser Phe Pro Lys Phe  
275 280 285

Tyr Asn Lys Leu Lys Ile Cys Ser Leu Lys Pro Lys Gln Pro Gly His  
290 295 300

Ser Lys Thr Gln Arg Pro Glu Glu Met Pro Ile Ser Asn Leu Gly Arg  
305 310 315 320

Arg Ser Cys Ile Ser Val Ala Asn Ser Phe Gln Ser Gln Ser Asp Gly  
325 330 335

Gln Trp Asp Pro His Ile Val Glu Trp His  
340 345

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<400> 9

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35	40	45															
Tyr	Ala	Val	Tyr	Leu	Phe	Asn	Leu	Val	Val	Ala	Asp	Leu	Leu	Leu	Ala		
50						55					60						
Thr	Ser	Val	Pro	Phe	Phe	Ala	Ala	Phe	Tyr	Leu	Lys	Gly	Lys	Thr	Trp		
65				70						75					80		
Lys	Leu	Gly	His	Met	Pro	Cys	Gln	Leu	Leu	Leu	Phe	Leu	Leu	Ala	Phe		
				85					90					95			
Ser	Cys	Gly	Val	Gly	Val	Ala	Phe	Leu	Met	Thr	Val	Ala	Leu	Asp	Arg		
			100					105						110			
Tyr	Leu	His	Val	Val	His	Pro	Arg	Leu	Arg	Val	Asn	Leu	Leu	Ser	Leu		
		115					120					125					
Arg	Ala	Ala	Trp	Gly	Ile	Ser	Ser	Leu	Ile	Trp	Leu	Leu	Met	Val	Val		
	130					135					140						
Leu	Thr	Pro	Gln	Asn	Leu	Leu	Thr	Cys	Arg	Thr	Thr	Gln	Asn	Ser	Thr		
145					150					155					160		
Glu	Cys	Pro	Ser	Phe	Tyr	Pro	Thr	Gly	Gly	Thr	Lys	Ala	Ile	Ala	Thr		
				165					170						175		
Cys	Gln	Glu	Val	Leu	Phe	Phe	Leu	Gln	Val	Leu	Leu	Pro	Phe	Gly	Leu		
			180					185					190				
Ile	Ser	Phe	Cys	Asn	Ser	Gly	Leu	Ile	Arg	Thr	Leu	Gln	Lys	Arg	Leu		
		195					200					205					
Ser	Glu	Ser	Asp	Lys	Gln	Pro	Thr	Ile	Arg	Arg	Ala	Arg	Val	Leu	Val		
	210					215					220						
Ala	Ile	Met	Leu	Leu	Leu	Phe	Gly	Leu	Cys	Phe	Leu	Pro	Ser	Val	Leu		
225					230					235					240		
Thr	Arg	Val	Leu	Val	His	Ile	Phe	Gln	Glu	Phe	Lys	Ser	Cys	Ser	Val		
				245					250					255			
Gln	Gln	Ala	Ile	Met	Arg	Ala	Ser	Asp	Ile	Ala	Gly	Ser	Leu	Thr	Cys		
			260					265					270				



Leu His Ser Thr Leu Ser Pro Ala Ile Tyr Cys Phe Ser Asn Pro Ala  
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Phe Thr His Ser Tyr Arg Lys Val Leu Lys Ser Leu Arg Gly Arg Arg  
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Phe

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Leu Pro Phe Leu Met  
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Val His Leu Leu  
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His Leu Lys Ser Trp Lys Ser Ser Arg  
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Ser Asn Arg Thr  
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Phe Ser Ile Cys His Thr Phe Gln Trp His Glu  
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Ile Lys Arg

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<400> 36

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tctcccgac tctgaggtc acatgcgtgg tgggtggacgt aagccacgaa gaccctgagg 180  
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